

19. The method according to Claim 18, wherein:

the engine includes a starter motor and the frictional torque of the engine is derived from the starter motor torque.

20. The method according to Claim 18 or 19, wherein:

the frictional torque of the engine is derived from a measurement of electric power consumed by the starter during starting and a known starter power consumption characteristic curve.

21. The method according to Claim 19, wherein:

the frictional torque of the engine is derived from a measurement of power consumption during engine acceleration.

22. The method according to Claim 18, wherein:

the reversible temperature effect is taken into account.

23. The method according to Claim 18, wherein a change in viscosity is only taken into account if the value (actual value) is outside a range of -15% to +50% of a predefined viscosity value at the same temperature.

24. A method of determining the viscosity of the motor oil in an internal combustion engine, comprising the step of:
determining the viscosity of the motor oil from the engine frictional torque.

25. The method according to Claim 24, wherein:

the viscosity of the motor oil is derived from an estimate of the engine frictional torque.

26. The method according to one of Claims 24 or 25, wherein:

the engine frictional torque is determined from the engine data available in an engine controller.

27. The method according to Claim 26, wherein:

one or more engine data selected from the group consisting of: injection time; throttle valve position; a signal that indicates whether a torque is transmitted to the drive train; and, signals concerning the operating condition of any auxiliary units directly driven by the engine; is used to determine the engine frictional torque.

28. The method according to Claim 26, wherein:

the engine is a diesel engine and at least one engine data selected from the group consisting of: a signal that indicates whether a torque is transmitted to the drive train; the load signal of the generator as a measure of the electric power generated by the generator; the engine rpm; the injected amount of fuel; the engine temperature; and, the ambient temperature; is used to determine the engine frictional torque.

29. The method according to one of Claims 24, 25 and 27, wherein:

the frictional torque of the engine is derived from the determination of the start torque and the engine acceleration power consumed.

30. The method according to Claim 29, wherein:

the engine is a gasoline engine.

31. The method according to Claim 29, wherein:

the starter torque is determined from the electric power consumed by the starter based on a known starter characteristic.

32. The method of determining the viscosity of motor oil of an internal combustion engine according to Claim 29, further comprising the steps of:

measuring the time between a start until a predetermined starter disengagement speed is reached, injecting a predetermined amount of fuel amount during the

B measured time, and estimating the frictional torque of the engine from the measured time.

33. A device for carrying out the method according to Claim 17, 18, 19, 21, 22, 23, 24, 25 or 26, wherein:
the device has a controller for processing and transforming measured data and at least one memory unit, characteristic curves needed for determining the viscosity being stored in the memory unit or in each memory unit.

34. A device for carrying out the method according to one of Claim 20, wherein:
the device has a controller for processing and transforming measured data and at least one memory unit, characteristic curves needed for determining the viscosity being stored in the memory unit or in each memory unit.

35. A device for carrying out the method according to one of Claim 24 or 25, wherein:
the device has a controller for processing and transforming measured data and at least one memory unit, characteristic curves needed for determining the viscosity being stored in the memory unit or in each memory unit.

36. The device according to Claim 33, wherein:
the characteristic curves are stored in the form of lookup tables.

37. The device according to Claim 34, wherein:
the characteristic curves are stored in the form of lookup tables.

38. The device according to Claim 35, wherein:
the characteristic curves are stored in the form of lookup tables.

IN THE ABSTRACT

NE Please insert attached page titled "ABSTRACT OF DISCLOSURE".